Oil Spill Clarifies Road Map for Sea Turtle Recovery

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Sea turtles have roamed the oceans for millennia. But in the course of just a few decades, hunting, coastal development, fishing, and pollution have driven their populations to dangerously low levels. Some, such as Kemp's ridley sea turtles, were beginning to make a comeback, thanks to efforts in Mexico and the US to protect their nesting beaches and reduce accidental entrapment in shrimp nets.

And then along came the Deepwater Horizon/BP oil spill.

Marine biologists feared the spill would be catastrophic for sea turtles in the Gulf of Mexico. And for good reasons. Five of the world's seven species of sea turtles live in the Gulf, and the spill coincided with nesting season for two of those species, the loggerhead and Kemp's ridley sea turtles. For the Kemp's ridley, the Gulf is the only known nesting ground.

For many living in the Gulf and around the country, these charismatic animals became the public face of the impact of the oil spill on wildlife. An extraordinary effort was needed to save as many sea turtles as possible.

It will take many years if not decades to fully understand the long-term impact of the spill on sea turtles. And there is no question many died, especially younger sea turtles. But thanks to an aggressive effort to capture and rehabilitate oiled sea turtles, and the final capping of the well, there is now hope for these magnificent creatures.

NOAA, the Gulf states, and many nonprofit partners teamed up to rescue more than 400 sea turtles from oiled waters and take them to aquariums and other facilities for de-oiling and rehabilitation. Charter fishermen from the Gulf coast assisted biologists and veterinarians in capturing turtles by locating Sargassum algae habitat where turtles might be found in oil.

NOAA and the Gulf states also helped the U.S. Fish and Wildlife Service, and other partners to move more than 25,000 sea turtle eggs from the northern Gulf shoreline to the Atlantic coast of Florida, to prevent hatchlings from entering oiled waters. NOAA, state wildlife agencies, and other partners also collected dead stranded sea turtles to determine, when possible, their cause of death.

In August, more than a month after the well was finally capped, I had the pleasure of helping release the first rehabilitated sea turtles into Gulf waters where habitat was healthy. Of the more than 400 sea turtles brought into rehabilitation, more than 96 percent have survived. Over 300 of these turtles have now been released back into healthy surface habitat in waters off Louisiana, Mississippi, and Florida. Some turtles with more severe injuries require longer rehabilitation. We expect that all the turtles will be returned to the wild.

While nearly all the rescued sea turtles were visibly oiled, to our surprise, most of the dead stranded sea turtles had no observable oil on their bodies and were in good health prior to their death. Necropsies (autopsies on animals) on more than half of 600 carcasses point to the possibility that a majority may have drowned in fishing gear. The evidence is that natural causes of death were ruled out, and that shrimp and fish – not a natural part of turtle diets – were found in their digestive tracts.

When NOAA became aware that a large number of stranded turtles may have drowned in fishing operations, we alerted state marine resource officials. In response, the Mississippi

Department of Marine Resources issued a rule in June to further restrict the time shrimp skimmer trawls could be towed to help prevent sea turtles from being caught and drowning. The high level of turtle strandings also prompted NOAA to consider a rule to require turtle excluder devices, or TEDs, in skimmer trawls. These devices consist of a grid built into the trawl and an escape hatch that allows turtles to swim away. TEDs are required in most shrimp fisheries and have proven effective in reducing sea turtle drownings when properly installed and maintained. Shrimp skimmer trawls are allowed to operate without TEDs, and are regulated with tow time limits.

The heightened scrutiny of the Gulf of Mexico during the oil spill brought to light the need for stronger cooperation between NOAA, the Gulf states, and the fishing industry to address the significant ongoing problem of sea turtles drowning in fishing operations. More enforcement is needed for TED requirements and tow time limits.

As NOAA and the states continue to assess the natural resources damaged by the spill, we are gaining a much clearer map of the important pathways to recovery for sea turtles. The fishing community has played a prominent role in the past in developing gear and techniques to prevent sea turtles from being unintentionally caught. These animals, which are already endangered, require our strong collective efforts for their long-term recovery. The recovery of sea turtle populations is essential to the Gulf's overall restoration.